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(59) Title: SYNCHRONIZING METHOD AND APPARATUS USING ERROR DETECTION OF SEQUENCE NUMBERS TO AVOID SYNCHRONIZING FAILURE

START Arrange sequence numbers of received PDUs in a time-consegutive list. $j \leftarrow 1, \delta \leftarrow 2$ Consider sequence numbers with list indices j and j-1. $\Delta_{\text{max}} \leftarrow N_{TTI} \cdot TB_{\text{max}} + \delta$ SN,-SN Yes Purge SN, from sequence numbers to be considered $j \leftarrow j+1$ for HFN update and adapt $\delta \leftarrow 2$ list indices accordingly. $\delta \leftarrow \delta + 1$ More list elements No STOP

(57) Abstract: The present invention relates to transmissions and retransmissions of packet data, particularly ciphered data, in a communications system. Especially, it relates to radio link transmissions and avoidance of deciphering failures in a cellular mobile radio system, particularly a Universal Mobile Telecommunications System, UMTS, or WCDMA system.

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